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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
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EXAMINER

MAYO III, WILLIAM H

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 05 09 2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,528

Applicant(s)

CAIMI, LUIGI

Examiner

William H. Mayo III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-43 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 33-43 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 10 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/396,683.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☒ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 6) ☐ Other:

DETAILED ACTION

Priority

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:
2. If applicant desires priority under 35 U.S.C. 120 based upon a previously filed copending application, specific reference to the earlier filed application must be made in the instant application. This should appear as the first sentence of the specification following the title, preferably as a separate paragraph. The status of nonprovisional parent application(s) (whether patented or abandoned) should also be included. If a parent application has become a patent, the expression "now Patent No. _____" should follow the filing date of the parent application. If a parent application has become abandoned, the expression "now abandoned" should follow the filing date of the parent application.

Information Disclosure Statement

3. The information disclosure statement filed December 14, 2001, has been submitted for consideration by the Office. It has been placed in the application file and the information referred to therein has been considered. However two references, on page 2, have not been considered because they do not contain a date in which they were published. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any

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missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Oath/Declaration

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
The specification to which the oath or declaration is directed has not been adequately identified. See MPEP § 601.01(a).

Specifically, the previous filed application number has not been included in the present oath.

Drawings

5. The drawing is objected to because Figure 1 lacks the proper cross hatching which indicates the type of materials, which may be in an invention. Specifically, the Figure lacks the proper cross-hatching that indicates the conductor and insulation materials. The applicant should refer to MPEP Section 608.02 for the proper cross-hatching of materials.

6. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after

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the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

Correction is required.

Specification

7. The disclosure is objected to because of the following informalities: The specification has a few of misspelled words. The applicant should reread the specification and correct all misspelled words. An example of a misspelled word is "tipically" on page 10, line 26.
8. The specification also has a few run on sentences. The applicant should reread the specification and correct all the run on sentences. An example of a run on sentences appears on page 10, lines 11-19. The applicant should also delete the ",", which appears after the period in line 19.
9. The use of the various trademarks have been noted in this application on page 14, 16, and 26. The applicant is reminded that they should be capitalized wherever they appear and they should be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Appropriate correction is required.

Claim Objections

10. Claim 36 is objected to because of the following informalities: It contains the misspelled term "polyerization". The applicant should replace the term with – polymerization--.
11. Appropriate correction is required.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
13. Claims 33-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
14. Claim 33 appears to be claiming a product and a method of making the product which is unclear and renders the claim indefinite. Specifically, the applicant states "an electrical conductor having a coating layer with the property of strippability" and then goes on to further define the coating layer by "a method of controlling the strippability comprising...", and therefore it is unclear what the actual metes and bounds of the claim are. If the applicant is intending to claim the electrical conductor, then the claim should be encompass the structure of the electrical conductor. If the applicant is intending to claim a method of forming the electrical conductor, then the claim should encompass the steps of forming the electrical conductor.

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15. Claim 33 recites the limitation "the electrical insulation properties" in line 4.

There is insufficient antecedent basis for this limitation in the claim because there has not been any previous reference to electrical insulation properties in previous lines of the claims.

16. Claim 33 recites the limitation "the cable coating" in line 4, which is confusing and renders the claim indefinite. It is unclear whether the applicant is referring to the previous mentioned "coating layer" or introducing a new cable coating. If the applicant is referring to the previous mentioned term, then he/she should recite the term with consistency. If the applicant is referring to a new cable coating, then he/she should make the term more distinguishable.

17. Claim 34 recites the limitation "said carboxyl group" in line 4, which is confusing and renders the claim indefinite. It is unclear whether the applicant is referring to the previous mentioned "at least one carboxyl group" or introducing a new carboxyl group. If the applicant is referring to the previous mentioned term, then he/she should recite the term with consistency. If the applicant is referring to a new carboxyl group, then he/she should make the term more distinguishable.

18. Claim 34 recites the limitation "said unsaturated polyolefin" in line 5. There is insufficient antecedent basis for this limitation in the claim because there has not been any previous reference to an unsaturated polyolefin in previous lines of the claims.

19. Claim 36 recites the limitation "said polymers" in line 1. There is insufficient antecedent basis for this limitation in the claim because there has not been any previous reference to polymers in previous lines of the claims.

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20. Claim 37 recites the limitation "said polymers" in line 1. There is insufficient antecedent basis for this limitation in the claim because there has not been any previous reference to polymers in previous lines of the claims.

Treatment of Claims

21. The examiner assumes that the applicant intends to claim the electrical conductor having a coating layer having the properties of strippability by adding the claim components.

Claim Rejections - 35 USC § 102

22. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

23. Claim 33 is rejected under 35 U.S.C. 102(b) as being anticipated by Hashimoto et al (Pat Num 5,561,185, herein referred to as Hashimoto). Hashimoto discloses an electrical conductor (Figs 1-3b) comprising a flame retardant resin composition (i.e. coating layer, Col 1, lines 15-22) with the property of strippability so that it can be stripped from the electrical conductor (Col 2, lines 40-43). Specifically, with respect to claim 33, Hashimoto discloses an electrical conductor (1) having a coating layer (2) having a material capable of being constant after exposure to moisture, wherein a method capable of controlling strippability of the coating layer (2) from said electrical

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conductor (1), wherein the coating layer (2) is capable of being constant after exposure to moisture wherein the method comprises adding to the polymeric composition (as denoted by the number 1 in Col 3, lines 9-15) forming the coating layer (2), a predetermined amount of polyolefinic compound (i.e. polyethylene modified with an unsaturated carboxylic acid) which contains at least one unsaturation (i.e. polyethylene) and at least one carboxyl group (i.e. carboxylic acid) in the polymer chain.

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claims 34-43^{34-35 & 38-39} are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto (Pat Num 5,561,185) in view of Hoshi et al (Pat Num 4,801,639, herein referred to as Hoshi). Hashimoto discloses an electrical conductor (Figs 1-3b) comprising a flame retardant resin composition (i.e. coating layer, Col 1, lines 15-22) with the property of strippability so that it can be stripped from the electrical conductor (Col 2, lines 40-43) as disclosed above with reference to claim 33. Specifically, with respect to claim 34, Hashimoto discloses a method wherein the polyolefinic compound (i.e. polyethylene modified with an unsaturated carboxylic acid) which contains at least one unsaturation (i.e. polyethylene) and at least one carboxyl group (i.e. carboxylic acid) in the polymer chain, wherein the at least one carboxyl group

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is derived from a reaction of a carboxylated compound (i.e. maleic anhydride) with a unsaturated polyolefin (i.e. polyethylene) wherein the carboxylic compound (maleic anhydride) contains at least one carboxyl group (carboxyl acid, Col 4, lines 39-65). With respect to claim 40₃₄, Hashimoto discloses a method, wherein the said carboxylated compound (Col 4, lines 66-67) may be an anhydride (i.e. maleic anhydride) of an unsaturated carboxylic acid (Col 4, lines 59-65). With respect to claim 41₃₄, Hashimoto discloses a method, wherein the carboxylated compound may be maleic anhydride (Col 4, lines 66-67).

However, Hashimoto doesn't necessarily disclose a method wherein the polyolefinic compound being derived from the polymerization of a diene or polyene monomer containing from 4 to 16 carbon atoms (claim 34), nor a method wherein the diene or polyene monomer being butadiene, pentadiene, hexadiene, hexatriene, heptadiene, heptatriene, octadiene, and mixtures thereof (claim 35), nor a method wherein the polymers having a polymerization number of 10 to 1000 (claim 36), nor the polymers having a polymerization number of 20 to 50 (claim 37), nor a method wherein the diene or polyene monomer being 1,3 butadiene, 1,3 pentadiene, 1,4 pentadiene, 1,3 hexadiene, 1,4 hexadiene, 1,5 hexadiene, or 2,4 hexadiene (claim 38), nor a method wherein the diene or polyene monomer being 1,3 butadiene (claim 39), nor a method wherein the carboxylated compound is an anhydride of an unsaturated carboxylic or unsaturated dicarboxylic acid (claim 40₃₅ & 38-39), nor a method wherein the carboxylated compound is maleic anhydride (claim 41₃₅ & 38-39), nor a method wherein the

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carboxylated compound is benzoic anhydride (claim 42₃₄₋₃₅ & 38-39), nor a method wherein the carboxylated compound is acetic anhydride (claim 43₃₄₋₃₅ & 38-39).

Hoshi teaches a flame retardant resin composition for usage with an electrical conductor or cable which generate no hazardous and corrosive gases of halogen type during burning due to fire outbreak (Col 1, lines 5-10) and is capable of preventing the deterioration and significant reduction in chemical resistance occurring of surfaces of the prior art resins (Col 2, lines 50-56). Specifically, with respect to claim 34, Hoshi teaches a method wherein a polyolefinic compound (Col 3, lines 10-23) is derived from the polymerization of a diene or polyene monomer (i.e. 1,3 butadiene), which contains from 4 carbon atoms (i.e. $\text{CH}_2=\text{HC}-\text{HC}=\text{CH}_2$) to form polybutadiene (Col 4, line 34). With respect to claim 35, Hoshi teaches a method wherein the diene or polyene monomer is polybutadiene, which contains 1,3 butadiene (Col 4, line 34). With respect to claim 36, Hoshi teaches a method wherein the polymer polybutadiene has a polymerization number of 10 to 1000 (i.e. about 100). With respect to claim 38, Hoshi teaches a method wherein the diene or polyene monomer is polybutadiene (Col 4, lines 33-34). With respect to claim 39, Hoshi teaches a method wherein the diene or polyene monomer is polybutadiene (Col 4, lines 33-34). With respect to claim 40₃₅ & 38-39, Hoshi teaches a method wherein the carboxylated compound is an anhydride of an unsaturated dicarboxylic acid (Col 4, lines 25-35). With respect to claim 41₃₅ & 38-39, Hoshi teaches a method wherein the carboxylated compound may be maleic anhydride (Col 4, lines 25-40). With respect to claim 42₃₄₋₃₅ & 38-39, Hoshi teaches a method wherein the carboxylated compound may comprise benzoic anhydride (Col 4, lines 43-

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47). With respect to claim 43₃₄₋₃₅ & 38-39, Hoshi teaches a method wherein the carboxlyated compound may comprise acetic anhydride (Col 4, lines 43-47).

With respect to claims 35-36 and 38-43₃₄₋₃₅ & 38-39, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the flame retardant composition of Hashimoto to comprise the carboxlyated compound, such as polybutadiene modified by maleic, benzoic, or acetic anhydride as taught by Hoshi, because Hoshi teaches that such a carboxlyated compound utilized in a conductor covering composition generates no hazardous and corrosive gases of halogen type during burning due to fire outbreak (Col 1, lines 5-10) and is capable of preventing the deterioration and significant reduction in chemical resistance occurring of surfaces of the prior art resins (Col 2, lines 50-56) and are known in the art (Col 2, lines 14-47) and since it has been held to be within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

With respect to claim 37, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the polymeric composition of modified Hashimoto to comprise polymers having a polymerization number in the range of 20 to 50, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Conclusion

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Bolick, Jr. et al (Pat Num 4,481,379), which discloses a cable having a dual insulation, Lee, Jr et al (Pat Num 5,294,655) and Hildreth (Pat Num 4,184,001), both which disclose a conductor having a dual insulation, Kuckro (Pat Num 5,710,202), Borke et al (Pat Num 6,197,864), Maringer et al (Pat Num 5,225,469), Maringer et al (Pat Num 5,256,489), Kawabata et al (Pat Num 5,418,272), Shiraki et al (Pat Num 5,234,994), Jow et al (Pat Num 5,482,990), Okada et al (Pat Num 5,412,024), Senuma et al (Pat Num 5,296,534), Auerbach et al (Pat Num 5,300,362), and Hayashi et al (Pat Num 5,889,087), all of which disclose flame retardant compositions, Betts et al (Pat Num 4,680,229), which discloses a conductor having a flame retardant insulation and Hawley Condensed Chemical Dictionary, Thirteenth Edition.

Communication

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (703) 306-9061. The examiner can normally be reached on M-F 8:30 a. m.-6:00 p.m.(alternating Friday's off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308-3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 305-1341 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to read 'WHM III', with a stylized flourish at the end.

WHM III
May 6, 2002